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CORRIGAN et al.(10) **Pub. No.: US 2019/0323415 A1**(43) **Pub. Date: Oct. 24, 2019**(54) **HIGH-PERFORMANCE INTERNAL
COMBUSTION ENGINE WITH IMPROVED
HANDLING OF EMISSION AND METHOD
OF CONTROLLING SUCH ENGINE****Publication Classification**

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Stefano PALTRINIERI, FORMIGINE
(MO) (IT); **Vincenzo ROSSI**,
GENZANO DI ROMA (RM) (IT)(57) **ABSTRACT**

An internal combustion engine comprising: at least a cylinder; at least an intake valve acting on an intake port for controlling the airflow entering the cylinder; at least an injector for supplying uncombusted fuel to the cylinder; at least an outlet valve acting on a respective outlet port **18** for controlling the flow of the exhaust gases at the outlet of the cylinder; a piston sliding in a linear manner within the cylinder; at least a first spark plug arranged in a position adjacent to the injector and acting within the combustion chamber; a pre-chamber communicating with the combustion chamber; and a second spark plug acting within the pre-chamber; the first spark plug is arranged in an intermediate position between the pre-chamber and the injector.

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